## **ABSTRACT**

The present invention is directed to identification of agents that modulate UBP43 activity as well as associated methods, uses, processes, compositions and agents. In particular, the invention is directed to *in vivo* and *in vitro* methods to identify an agent that inhibits or stimulates UBP43 activity within a cell, a method for inducing cellular apoptosis, a method for affecting cellular reaction to interferon, a method for treating disease associated with cellular proliferation by causing apoptosis, and a method for treating both acute and chronic diseases in which interferon exerts a beneficial effect. The invention is also directed to modified ISG15-conjugates that have lowered or no susceptibility to UBP43 cleavage, pharmaceutical compositions of the agents, conjugates, and additional modified ISG15-conjugates.